

The question of methodology in history may seem superfluous or even irrelevant to the general study of the past. Some scholars deny the existence of any method followed by historians and claim that mere common sense is the best guide to the interpretation of the past. In general terms I too believe this is true in the pursuit of all knowledge and one should not differentiate between 'specific methods' peculiar to one discipline as opposed to another. The end in all cases, it seems to me, is the same, and the natural sciences are only in a better position than other disciplines since their material is far less elusive than in other domains of human activities. After all, even today in the age of rockets and satellites, one should not forget that the sciences, especially the natural sciences, in reality discover or create nothing new. What they do is to view the given with new perspectives and rearrange our theories and concepts of ever more assembled data. Therefore, the best guide to all knowledge is simplicity and order in the classification of data, so that the scholar may gain new insights by that very ordering of material. So it is, I believe, with the study of the past. One must follow the guide of simplicity and the most efficient organization of data, to explain the past.

The past, however, is sometimes kind to the investigator in the mere accumulation of data which needs to be sifted, weighed, and discarded or retained for the historian to employ his insights and knowledge of comparable situations, drawing analogies and by logical processes of thought reconstructing his picture of the past. The history of Iran before the Arab conquests, however, presents a different picture of data and sources than other histories because of the great paucity of materials available. There is little hope of sifting and comparing sources in this realm, as one would do in modern French history for example, since every fragment of an inscription, every object of material culture, every word in a text of any kind whatsoever, must be scrutinized as with a microscope, to extract all possible information from it. Unfortunately this sometimes leads to flights of fancy and speculation which are not at all warranted by the evidence at hand. Although the temptation is great to make mountains out of molehills, I reaffirm that the true path to follow is

simplicity, restraint and a frank admission of our inability to push our knowledge further than the materials permit. These words may sound simple and unnecessary, but in the field of Iranian history they must be repeated constantly and heeded with the utmost conviction, since temptation to flights of fancy is so strong. Another admonition in this field, is not to neglect any piece of information, any text, no matter how late or apparently irrelevant it may seem to be, because in the Orient memories were much longer than in the West, and items of information could have been passed on from generation to generation for centuries without having been committed to the written word. Thus, in later books information relevant to a far earlier period may be preserved, all knowledge of which is missing from earlier works. Such later information may be more important than one at first believes, and it may change our view of the past.

To return to the question of method, some scholars will claim that I am only stating simple and obvious truths, yet I believe these simple matters are sometimes forgotten and need to be re-stated, especially for students who enter this field. In embarking on the investigation of any problem, and scholarship advances by asking questions as well as by recognizing problems, the first task is to formulate the problem, always realizing that a study of the evidence may change that formulation. Then the evidence must be assembled. Since the written word is so much more informative than objects of material culture, more attention must be devoted to texts than to archaeology, used in its widest sense. If texts are available, then textual criticism is necessary at the outset. Much has been written about textual criticism, and much has been accomplished in the Classical field which should serve as a model for the investigator of the history of Iran. This is not the place to go into detail about variant readings, the lectio difficilior, and such matters. Suffice it to say that careful attention to the principles of text criticism are essential to proper scholarship in the history of Iran at all periods.

After the texts have been established, and we know as well as possible what they meant to say when they were written, a historian's task is to study their background. Why were they written? What interests do they represent? What was the historical milieu in which they were written? Such questions are very important not only for a correct assessment of the sources but more for our picture of the history of any given time or place. After the background of the texts has been satisfactorily established, then one must assess the reliability and the exact interpretation of passages important for the historical problem under investigation. Not only is

lexicography important, for example the comparison of certain passages with parallels elsewhere, but also much auxiliary information must be consulted for an interpretation of textual passages. Too often in the lacunae-filled history of Iran an assumed possibility or probability has been taken for proof upon which hypotheses are built, and incorrect argumentation has resulted. For example, if in the archaeological excavation of Susa evidence for destruction was found on the site, which from the stratification should have dated from Sasanian times, and in a Syriac source it was stated that Shapur II destroyed Susa after an insurrection, then it was 'proved' that the destruction should be dated about 350 A.D. and the excavation then 'proved' that the source was reliable'. The possibility that the destruction might have been caused by someone else for another reason is completely ignored, and the certainty of a mathematical QED is fixed upon the investigation. Upon such 'certainty' other constructions are raised, which also receive their authentication in a similar manner. Thus one should always clearly state the alternatives to a proposed explanation which then has further consequences.

Likewise sometimes the existence of archaic words, or even concepts, in a late text, will persuade the investigator that his text is a translation from or an adaptation of a much older text. This can be especially dangerous in the conclusions drawn from the study of a Middle Persian text of the third century A.D. which has 'real origin' in heavy antiquity. Obviously not only were archaic terms sometimes preserved in some parts of Iran, or some authors or copyists had a penchant for rare words, but also at times ancient ideas, archaic syntax, or the like, in some way may have been preserved and this can be misleading. For example, the Middle Persian texts on Zurvanism in certain places may seem to be much more ancient than the presumed dating of the texts themselves since ideas of time speculation theoretically should be very ancient. As a corollary or continuation of this, frequently literary texts dealing with legends are assumed to have an historical basis and then historical conclusions are drawn from them. The distinction between history and fable, or even literature in general, must be observed or frequently strange results may follow. Furthermore, one must keep in mind different concepts of history. For Leopold von Ranke history was the report of what actually happened. Others have been less sanguine and have characterized history as that which historians thought had happened. In Iran one could go a step further and say that history is what people thought should have happened. I will expand on this below.

<sup>1</sup> P. BEDJAN, *Acta martyrum et sanctorum*, 2 (Paris, 1892), p. 264.

From these few observations the dangers of not having an open-minded, as well as a rational and systematic, approach to the evidence should be apparent. Again, this may seem to many like a self-evident and obvious statement, but in the present world too many people have forgotten the admonitions about fallacies in logical thinking taught by such thinkers as Aristotle, Bacon and Hegel. I still believe that their writings can teach us and aid our fundamental processes of thinking. Simple though they may be, it is not always easy to apply such principles to problems, but by formulating questions and presenting alternate answers, we may gain clarity in some matters. I repeat that the posing of questions, questions relevant to our problems, is the first step in the advancement of knowledge. Let us consider a few problems in Iranian history in this light.

One of the most disputed problems of ancient Iranian history is the date of Zoroaster. Without going into the prolegomena to the problem, by analyzing the sources according to the remarks above, we may investigate the most commonly accepted opinion<sup>1</sup>.

The most accepted opinion on the date of Zoroaster was formulated by the late W. B. HENNING, who wrote in support of the traditional date of Zoroaster, as found in the Zoroastrian books of the 9th century A.D., especially in the Bundahishn which stated that Zoroaster had appeared 258 years before Alexander<sup>2</sup>. Much has been written about the meaning of the phrase 'appeared before Alexander', with many opinions on the meaning of the word 'appeared' and the words 'before Alexander'. We need not review the various theories that 'appeared' meant 'was born,' or 'received vision,' or 'converted Vishtāspa,' and whether 'before Alexander' meant before 'the Seleucid era,' 'the death of Alexander,' or whatever. HENNING declared that the number 258 years should be accepted, since following the principle of the lectio difficilior, one would expect any created number to have some mathematical, astrological, or symbolic significance, whereas 258 had no such obvious reason for anyone to select it as a good number for Zoroaster. Therefore it should belong to a genuine tradition and should be accepted as reliable, no matter what the words of the phrase really meant. Since even adversaries of HENNING, such as

<sup>1</sup> Fortunately much of the work of collecting and analyzing the sources for the date of the prophet has been done by A. V. W. JACKSON, *Zoroaster* (New York, 1898), pp. 150—181, by C. CLEMENS, *Die griechischen und lateinischen Nachrichten über die persische Religion* (Gießen, 1920), pp. 11—28, and by others.

<sup>2</sup> Actually the Bundahishn (36, 8) does not give the number 258, but if the reader adds up the reigns of the rulers before Alexander from the time of Zoroaster's conversion of Vishtāspa, the result is 258, thus Vishtāspa 90 years, Vahūman 112, Hōmāy 30, Dārāy II 12, Dārāy II 14, or the sum of 258.

Franz ALTHEIM, accepted HENNING's reasoning it seemed that the date of Zoroaster 258 years before 330 B.C. the end of Darius' rule, or 588 B.C. was now generally accepted. Just what that date meant was uncertain, but it was believed to have been an important date for some event in the prophet's life.<sup>1</sup> Other sources, such as Theodore bar Qoni, give general dates for Zoroaster, as 300 years before Alexander, thus 'confirming' the traditional date. Another interpretation of these other sources, however, is that they vaguely knew the Iranian popular tradition but did not bother to count the reigns of the kings. I think it is very important to remember that the 'religious' tradition, as found in sources such as the Bundahishn, coincides with the 'popular' tradition as found in Firdōsī, and other later authors. Since the list of rulers is the same in both traditions, we may safely conclude that the two traditions coincide.

Once having accepted the thesis that the number 258 is common to both the Zoroastrian tradition and the popular, epic tradition, the next task is to explain how it arose. Either one borrowed from the other, or both are derived from a third source, which is unlikely for the third source would be a royal or an official source which would be more historical. From the length of reigns of the rulers between Vištāspa (Gushtasp) and Alexander, in the Shāhnāme, one can at once assert that the epic tradition cannot be historical (see note 3). Rather this tradition is similar to the long lives given to the patriarchs in the genealogies of the Old Testament. Now the question is, whether the length of reigns of the rulers of the epic tradition were fitted into the given time span of 258 years, or whether the combined reigns just happened to add up to 258. In other words, did the religious tradition come first or the popular, epic tradition?

Both the Shāhnāme and the Annals of the Kings of Ancient Persia by Thaʿlībī, not to mention al-Bīrūnī and others, agree with the Bundahishn on the order and reigns of the kings before Alexander. So we may safely say that all Iranian traditions, religious, popular and otherwise, generally concur in the date of Zoroaster and in the order of rulers after him to the time of Alexander. It is likely that this date derived from the priestly tradition, as HENNING argues that the date 258 was the only date the priests preserved from ancient times after the era of Alexander. To quote him (p. 40): 'It is but natural that the members of the early Zoroastrian community should have counted the years from a significant moment in the life of their prophet, and that they should have gone on doing so until Alexander destroyed the Persian Empire, and with it, the power of the Magi; that with the confusion brought on by the Macedonian conquest the

<sup>1</sup> W. B. HENNING, *Zoroaster, Politician or Witch-Doctor?* (Oxford, 1961), p. 41.

counting of years should have been interrupted, but, that, nevertheless, that one date, so- and so-many years before Alexander should have been remembered for all time, although otherwise the memory of all that went on before Alexander and of much that happened after Alexander was extinguished.' For HENNING then it is clear that the mythical reigns of the kings were later fitted into the true number of 258 years before Alexander.

There are two arguments against this assumption. First, if the date 258 was so important that only it was remembered after Alexander, surely this important fact would have been known to some classical writers of the late Hellenistic period such as Pliny and Plutarch, who place Zoroaster in remote antiquity. I am not arguing for the remote age of Zoroaster, but rather asking why the popular tradition was not known to the Greeks and Romans. Second, and more damaging, is the origin of the number 258. As far as I know, this number as a whole number appears only in one late author, al-Bīrūnī who claims the Persians count the time between Zoroaster and Alexander as 258 years.<sup>2</sup> This, it seems to me, is the crux of the matter. The Persians count the reigns of the kings, rather than accept a traditional hallowed number. In other words, they add up the reigns of the kings rather than accept a given figure. One may ask whether a popular, epic tradition of the rule of the Kayanian kings was taken over by the priests, who were not concerned with history, but wanted to fit the prophet into a history, even though it were epic in character. Otokar Křtina sought to discredit the number 258 by showing it was a misunderstanding of the real history, but his attempt to date the revelation of the religion to Zoroaster 232 years before Darius I, equating him with the Dabō of the Persian tradition, is also unconvincing.<sup>3</sup> Křtina uses the very data he discredits, viz. the length of reigns of the kings from Vištāspa to Dabō, 232 years, to reach a date 754 B.C. for Zoroaster's conversion of Vištāspa. Rather the lengths of reigns, individual or added, seem to me to be historically unreliable, indeed epic. I believe only that the date 258 was obtained by adding the length of rules of the Achaemenian kings before Alexander, and since the names and figures are impossible, in spite of attempts by E. Waser and others to force the epic names into historical names and dates, I see no alternative but to abandon the date. The next question naturally to be asked is how did the ancient Persians come to assign such years of rule and such names to the era from Zoroaster to Alexander? The answer to this, I believe, must be sought in the practices of singers of songs and makers of epics, where the fantastic

<sup>2</sup> Athār al-Bāgiya, ed. E. Sachau, text 14, trans. p. 17, line 17.

<sup>3</sup> O. Křtina, *The Date of Zoroaster*, Archiv Orientalni, 27 (1959), pp. 556—564.



is joined with the historical. Therefore, I propose that the popular tradition is a mixture of the fabulous, e.g. Vishtāspa's reign of 120 years, Zoroaster appearing after 30 years of rule, and of semi-historical information, e.g. the two Darius kings. It is not at all unusual to have such a mixture in an epic tradition. The numbers for the reigns could come from various sources, for example the reign of Vishtāspa is four *garn* 'era' (thirty years) in Iranian beliefs, and the supposition that his reign represents a joining of four reigns is, of course, completely unhistorical but possible in *garn*, or length of a man's life, speculation. I can find no historical reality for the number 258 or for the length of reigns of the various rulers. Therefore, we should return to a non liquet for the date of Zoroaster, which is better than a false assumption. If pressed, I would suggest a slightly older date for Zoroaster than 258 years before Alexander, since the early Greeks probably heard from some Persians about his hoary antiquity because the Persians themselves did not know what had happened in eastern Iran before Cyrus the Great. The date 258, I believe, is a later (Sasanid) creation<sup>4</sup>.

Another matter of interest to which a typology might be applied is the vexing question of the rise of the cumbersome system of Middle Iranian writing, using Aramaic masks or 'logograms' for verbs and many common words. Again we may quote HENNING who wrote, "man darf als sicher ansehen, daß das Aramäische etwa in der Mitte des 2ten Jhdts. (v. Ch.) von mit Hilfe aramäischer 'Ideogramme' geschriebenen iranischen Sprachen verdrängt wurde und daß die damals neu entstandenen Schriftsysteme sich im Laufe des 1sten Jhdts. weiter ausgebildet haben, um etwa in den ersten Jahrzehnten unserer Zeitrechnung ihre Vollendung zu erreichen; die späteren Veränderungen sind verhältnismäßig geringfügig." I should like to apply a rather mechanical, historical test to the proposition that in Iran the official language evolved gradually from Aramaic to Middle Iranian languages with Aramaic 'ideograms or logograms.' I propose a scheme of four languages used at any one time and place, 1. the 'official' written language, 2. the 'official' spoken language, 3. the

<sup>4</sup> Hints of the existence of a 'religious' era, in use by Zoroastrian priests, beginning from the date of the acceptance of the religion by Vishtāspa (as the *padri-tan-i dēn* in the *Great Bundahishn*, 240, (viz. folio 122a, and 119 b, ed. B. T. Anklesaria, Bombay, 1956) do not 'prove' the reliability of the number 258. As a matter of fact, the phrase '528 years' before the coming of the religion as found in the *Vichitakha-i Zatsparam*, ed. B. Anklesaria (Bombay, 1964), text p. 46, as well as other dates, '300 years before the religion,' does not inspire confidence in the historical reality of a known and fixed date before Alexander. There were undoubtedly several systems of reckoning time in ancient Iran, but none seem to have preserved historical dates of the pre-Achaemenid period.

religious language, and finally 4. dialects. Let us take Babylon, Persepolis, Ecbatana or Hamadan, and Samargand in the time of Darius, in the first century A.D. and in the third century A.D. We may present the results in a table.

|            | Darius  | 1st cent.<br>(ca. 25) A.D.  | 3d Cent.<br>(ca. 225) A.D.  |
|------------|---|---|---|
| Babylon    | 1. Accadian<br>2. Aramaic<br>3. Accadian-Sumerian<br>4. "Dialects"  | 1. Aramaic and Greek<br>2. Parthian<br>3. Accadian and others<br>4. Aramaic dialect and Greek, etc.                           | 1. Cursive Aramaic<br>2. Middle Persian<br>3. Syriac and others<br>4. Aramaic dialects                      |
| Persepolis | 1. Elamite<br>2. Old Persian<br>3. Avestan (?)<br>4. Persian dialect  | 1. Aramaic<br>2. Parthian<br>3. Avestan<br>4. Persian dialect   | 1. Middle Persian<br>2. Middle Persian<br>3. Avestan<br>4. Persian dialect                                  |
| Ecbatana   | 1. Accadian<br>2. Median or Old Persian   | 1. Aramaic (and Greek ?)<br>2. Parthian   | 1. Parthian<br>2. Middle Persian  |
| Samargand  | 3. Avestan (?)<br>4. Median Dialect<br>1. Aramaic<br>2. Old Persian<br>3. Avestan (?)<br>4. Sogdian dialect | 3. Avestan<br>4. Median Dialect<br>1. Aramaic (and Greek ?)<br>2. Parthian or Sogdian<br>3. Avestan (?)<br>4. Sogdian dialect | 3. Avestan<br>4. Median Dialect<br>1. MP or Sogdian<br>2. MP or Sogdian<br>3. Avestan<br>4. Sogdian dialect |

In no case do all four languages coincide, but we may make an observation. In the first century A.D. everywhere the 'official' written language, and by 'official' I mean the language of communication and in the archives of the state, is given as Aramaic and/or Greek. There may be many errors in grammar and non-Aramaic words in extant Aramaic texts from this period, but the alphabet is Aramaic and the language is Aramaic. I refer to the ostraca from Nisa, the documents from Avroman, the inscriptions from Armazi (2nd cent. A.D.), and the coins of Persis. Parthian coins, on the other hand, have Greek legends down to the fall of the empire about 225 A.D. It seems to me clear that Aramaic and Greek were the 'official' written languages on the Iranian plateau, as well as elsewhere, throughout most of the Parthian period as they were under the Seleucids. Only in the first century A.D. do changes begin to occur. From the time of Vologases I (ca. 51-80 A.D.) Aramaic (or Parthian) legends appear for the first time on Parthian coins, where ~~previously~~ only Greek was used. It is true

that Aramaic did not replace Greek, right down to the end of the dynasty, but Aramaic legends do occur, and for the first time under Vologases I. Furthermore, the gathering of fragments of the Avesta by a king Valakhsh mentioned in the *Denkart* (Madan, 412-1.5), may well refer to Vologases I. This would indicate an 'orientalization' of the Parthian state at this time, which would fit well with the political history of conflict with Rome, and, incidentally, it would fit in well with the beginning of the change from writing in Aramaic to a developed system of 'logograms'.

The differences between the texts of the Achaemenid Prince Arsama in the 5th A.D. and the 'Reichsaramäisch' of the Achaemenid Prince Arsama in the Elephantine documents are far less than between Aroman and the Parthian versions of the inscriptions of the early Sassanian kings. To come to the point, I believe the development of the 'logogram' system of writing is not a steady, gradual one from the Achaemenids to the Parthians, but in the later Parthian period one may assume that conscious attempts were made to change the writing system. I suggest that Papak, or Artashir early in his reign, somewhat like Darius the Achaemenid, ordered the scribes to prepare a better system of writing Middle Persian for inscriptions, and reforms were made in the old system of writing, especially with better letters of the alphabet. I am not suggesting that there was a great language reform that with one decree changed completely the system, as ALTHEM asserts, but rather the intervention of a new imperial power in the tidying up of a writing system perhaps adequate to a provincial petty kingdom in Fars, but not for a new, expanding empire. Further finds of epigraphic material in Fars, as well as elsewhere in Iran, will, I believe, substantiate the above theory, just as, I believe, excavations of pre-Achaemenid Median sites, will reveal Accadian as the official language of the Median court.

In addition to the table I proposed above, I would like to suggest that there were probably various schools of scribes in the different parts of the former Achaemenid Empire which developed different traditions as time advanced. Also one should not forget that there were probably at least three different kinds of scribes, 1. royal or governmental scribes, 2. religious scribes, and 3. scribes for the common folk, for merchants, traders, and the like. Sometimes they fell together, whereas at other times they were highly differentiated. With the flourishing of local nationalisms in the first century A.D. and the subsequent weakening of the central government of the Parthians, it is not too much to suggest that the systems of writing became more varied and certainly more Iranian in character. By 'Iranian in character,' I mean that different ways of writing the

Aramaic 'logograms,' with different endings began to develop. Naturally, a highly infected language such as Old Sogdian hardly could be written in the same way as Middle Persian which had lost all case endings, gender, and other grammatical forms. It is also highly probable that the influence of the scribes who wrote for merchants and others increased at the expense of the royal or governmental scribes in parallel with the decline in power of the central government under the Parthians. So the development of writing in Iran, in my opinion, parallels the course of history, more Iranicization and the decline of central power. The second century A.D. was a time of change in the Orient and unfortunately in Iran it is a blank page of history.

The spread of the Persian language all over the Iranian cultural area was started by Artashir and concluded first by the Arabs with the expansion of Islam, and then by the Turks with their expansion into Anatolia and India. If Artashir had not won, the linguistic picture of the Iranian area might be very different today.

To turn to another question, I believe one must reexamine the nature of religious reformers in the history of Iran, figures such as Mazdak in Sassanian times, and Babak, Mughams, and others in Islamic times, applying criteria of the comparative history of religions to them. For example, one might well differentiate between reformers, either religious or social, and figures who fit into the messianic tradition of Iranian history, or into millennium speculation. Thus, to refer to the Sassanian period of Iran's history, Vahram-i Vartjervand, seems to me to be an example of the millenary tradition, for he is a truly messianic personality, even though probably a greatly heroicized form of the historic Bahram Chobin. As I have frequently stated, in the past of Iran, for the people, history was not what really happened, or even what they thought had happened, but what they thought should have happened. This is a fundamental characteristic of the view of the past among a people who have a strong epic tradition and a messianic tradition of time speculation. Likewise, in my opinion, patterns repeat themselves readily in the history of Iran, or rather the reporter of events readily seizes upon past accepted patterns to relate to or explain these recent events.<sup>7</sup> I believe that one of these patterns can be used, for example, to better explain Mazdak who seems to have been a social reformer more than anything else.

<sup>7</sup> Frye, *The Charisma of Kingship in Ancient Iran*, *Iranica Antiqua*, 6 (Leiden, 1964), pp. 36-54.

Much has been written about Mazdak, including two books, one by Arthur Christensen, another by O. Kluge, and much in the writings of Franz Altheim. All generally agree that Mazdak's teachings were a reform of Manichaeism first taught by a certain Bundos, who had lived for a time in Rome. Yet Mazdak won over King Kavad and many dignitaries of the court and church at the end of the fifth century in Sasanian Iran. The natural question arises, how could a Manichaean heretic sway so many important personages when Manichaeism itself was proscribed? Without going into detail, it should seem highly probable, at least to anyone who is well acquainted with the Orient, that Mazdak could not have won such success with a claim to be a Manichaean heretic. When we probe deeper into all sources, we find some which say he was a Zoroastrian priest and so claimed to be. The pattern, not unknown in the long history of Iran, I suggest, is this: Mazdak claimed to be a reformer of the orthodox Zoroastrian church, and after the failure of the movement and the bloody suppression of the movement, Mazdak was then condemned as a Manichaean heretic, who got his ideas from the accursed enemy milieu of Rome. There is, of course, no way in which this can be checked, but the pattern would fit parallels elsewhere, even including Western Europe where reformers or heretics of the church were condemned as Manichaeans.

A final remark on method in history concerns seal inscriptions, and is different from the above questions. With the growing number of catalogues of Sasanian seals an historical assessment of them is becoming possible. The sheer number and variety of the seals indicates the important purpose they served as the substitute for a modern signature. But the very number of such seals compared with earlier times also attests to the highly organized bureaucracy in Sasanian Iran, and the much expanded economic activities of more of the populace as compared with the past. It is now apparent that seal makers were very busy under the Sasanids, turning out expensive, beautiful seals for the powerful or wealthy and much more modest specimens for the common folk. Varying styles or specialties of certain stones, or ways of carving, certainly existed, but of equal or more interest are the large number of seals attributed to priests. There is no doubt that many of the functions of the later Islamic qādī had their origin in Sasanian times, and the legal system of Sasanian Iran was essentially in the hands of the Zoroastrian priests. The priests were also officials in the registration of commercial transactions, as the more than 500 clay sealings from Qasr-e Abū Naṣr (Old Shiraz) would imply. If we remember that irrigation and the utilization of land in Iraq and Khuzistan were far greater under the Sasanids than before or after, then

we may gain a better appreciation of the great expansion of commerce, farming and of governmental organization which took place under the Sasanids<sup>8</sup>.

It should be possible now, using statistical methods on the vast number of seals, to roughly determine the relative size of the priestly class, the administrative subdivisions of the land, the hierarchy of provincial organization, and many other matters. We need more archaeological excavations which will bring new material to the historian, who must know how to study, classify and interpret various kinds of evidence from the past. Likewise new methods for the interpretation of texts can reveal new insights to the historian. For example, to turn to the early Islamic period of Iran's history, the great numbers of *Ṭabaqāt* histories of cities, or those arranged chronologically, have hitherto denied attempts of historians to extract meaningful information from them, since they seemed less informative than the telephone book of a modern city. By the application of statistical methods to them, however, it should be possible, for example, to discern trends in the growth, or movement from city to city, of scholars holding to Hanbalī, Hanafī, Shī'ite, or other persuasions, important for Islamic history. Likewise, the growing influx of Turks into the Near East, or similar questions, can be determined. In other words, I believe that we can apply new insights and new methods to the study of much of the past to obtain interesting information. As in any such endeavor, however, there are many caveats to be observed and many problems will arise. It is not possible to discuss such problems here, but it seems to me clear that the application of typologies, the use of new methods if you will, to problems of Iranian history, has just as much meaning and validity as in the study of languages. Many scholars claim that the understanding of historical phenomena is based on individual events which cannot be, or which were not repeated, whereas all scientific knowledge is based on the general, which is repeated, with nomothetic character. I believe that if we were able to assemble all, and I mean all, of the data, regarding an event in the past, we would be able to discover why and how such an event happened, just as in the natural sciences or in linguistics, if we were able to gather all of the data we could formulate exhaustive laws, but in history they would be neither absolute nor eternal any more than they are in the natural sciences. In

<sup>8</sup> See Robert Adams, *Land Behind Baghdad* (Chicago, 1965), pp. 73 and 83; also his article, *Agriculture and urban life in early southwestern Iran*, *Science*, 136 (1962), p. 11.

the natural sciences we have made much more progress towards this goal than in linguistics, and in linguistics far more than in history. Whether we can ever make similar progress in history is questionable, but nonetheless I believe that there is no basic difference between scientific and historical explanation and the overall method of approach should be the much the same.

## TARXŪN-TŪRXŪN AND CENTRAL ASIAN HISTORY

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